REMARKS

I. Introduction

Upon entry of the present amendment, claims 1-7, 10-12, and 14-21 will remain pending in this application. Based on the following remarks, Applicants respectfully request reconsideration and allowance of the pending claims.

II. 35 U.S.C. § 102

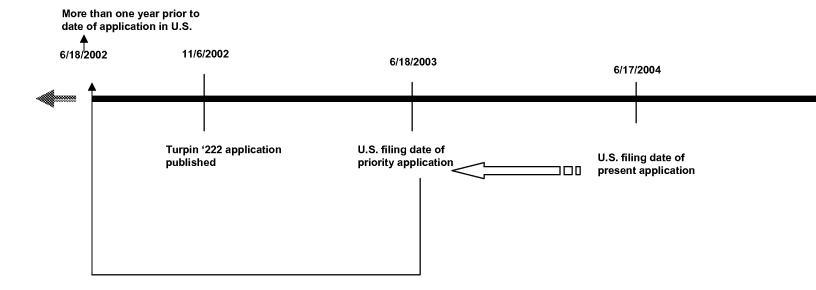
Claims 1-6, 10-12, 14, and 16-21 are rejected under 35 U.S.C. § 102(b) as being anticipated by G.B. Patent Application No. 2375222 to Turpin. Applicants respectfully traverse this rejection and request reconsideration and withdrawal thereof.

A. Turpin '222 is not available as prior art

First, Applicants submit that the Turpin reference is not properly available as 102(b) prior art. 35 U.S.C. § 102(b) states that "A person shall be entitled to a patent unless — (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of the application for patent in the United States." However, Turpin '222 was published only about 7 months prior to the effective priority date for at least Claims 1, 7, 10, 14-17, 19 and 21.

More specifically, Turpin the application that led to the Turpin '222 UK patent was published on November 6, 2002. The present application has a U.S. filing date of June 17, 2004 (as PCT application PCT/GB2004/002642, published in English as WO 2004/114446, see 35 U.S.C. 363). That PCT application claims priority to PCT/GB03/002621 (WO04/001874), which entered the U.S. national phase as U.S. Serial No. 10/516,216 and

has a U.S. filing date of June 18, 2003. These relationships are illustrated on the below timeline:



Figures 6 and 7 of the priority application (PCT/GB03/002621) are identical to Figures 3 and 4 of the present application. Page 6, lines 18-22 (referring to physiological systems such as the lung, which provides branched channels), pages 8 and 11 (referring to land areas and array of lands), page 10 (referring to convoluted channels, as well as narrow and varying width channels), and page 11, lines 7-12 (referring to fine diffusion channels) of PCT/GB03/002621 provide support for Claim 1 of the present application. Basis for Claims 7, 10, 14-17, 19 and 21 can also be found in the priority application as follows:

Claim 7 – Fig. 7
Claim 10 – Page 11, lines 12-13
Claims 14, 15 – Page 11, lines 12-13 [a hexagon is a polygon]
Claim 16 – Page 10, lines 26-28
Claim 17 – Claim 1
Claims 19 and 21 – Page 2, lines 1-2

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Accordingly Turpin '222 was published only about 7 months prior to the effective

priority date for Claims 1, 7, 10, 14-17, 19 and 21. Therefore, Turpin is not applicable as

prior art against these claims under 35 U.S.C. 102(b) because it was published less than one

year prior to the date of the application for patent in the United States. Accordingly, it is not

available as prior art to reject those claims.

Turpin '222 does not disclose the presently claimed invention В.

Additionally, claim 1 recites that the array of lands defines both a network of

interconnected fluid diffusion channels, as well as one or more branched fluid

delivery/removal channels, and that the fluid delivery/removal channels are wider than the

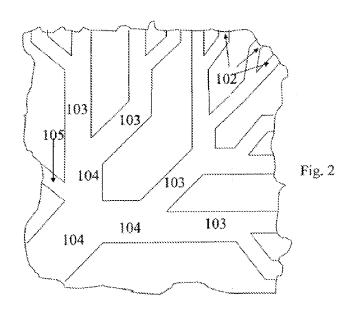
fluid diffusion channels. Contrary to the assertion at page 2 of the Office Action, Figure 2 of

Turpin '222 does not provide an array of lands. Turpin merely discloses a fan shaped

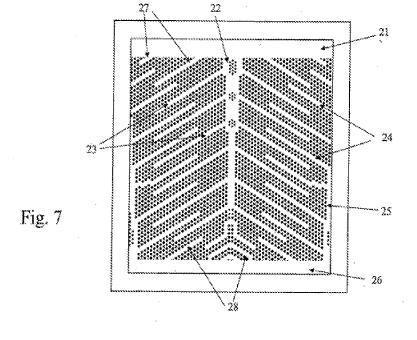
network. There is no matrix flow field, just a series of channels. Compare Turpin Figure 2

with Applicants' Figure 7, both reproduced below. Notably missing from Turpin is any

teaching or suggestion of an array of lands.



TURPIN FIG. 2



APPLICANT'S FIG. 7

Turpin '222 accordingly does not disclose a matrix flow field comprising an array of

lands defining a network of interconnected fluid diffusion channels, further defining one or

more branched primary fluid delivery/removal channels as presently claimed. For at least the

above-discussed reasons, Claim 1 (from which the remaining rejected claims depend) should

be considered novel over the disclosure of Turpin '222.

III. 35 U.S.C. § 103

Claims 7 and 15 are rejected under 35 U.S.C. § 103(a) as being unpatentable over

Turpin in further view of WO 2002/069426 to Abdou. Without acquiescing to the proper

combinability of the cited references or any of the Examiner's rejections, Applicants submit

that the features of the rejected claims should be found patentable at least for the above-

discussed reasons with respect to the Turpin '222 patent, such that even if Turpin is

combined with the cited reference as suggested, the claimed invention would not result.

Applicants thus respectfully traverse these rejections and request reconsideration and

withdrawal thereof.

For at least the above reasons, Applicants respectfully request allowance of the

pending claims and issuance of a patent containing these claims in due course. If the

Examiner believes there are any issues that can be resolved via a telephone conference, or if

there are any informalities that can be corrected by an Examiner's amendment, he is invited

to contact the undersigned.

Respectfully submitted,

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